## A NEW VARIETY OF ANOPHELES MARSHALLI Theobald FROM THE BELGIAN CONGO

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Anopheles marshalli var moucheti var. n.

FEMALE. *Head* with upright forked scales pure white anteriorly, black posteriorly; forwardly projecting tuft of long white scales reaching well beyond the base of the clypeus. Palpi with three white bands, the proximal narrow, the two distal bands very wide, equal in length, and separated by a black ring one-quarter to one-half of their length. Antennae with white scales on the second segment,



FIG. 1. Anopheles marshalli var. moucheti var. n. Q wing.

hairs of whorls white. *Thorax*: prothoracic lobes with blackish bristles, mesonotum with long, white, narrow, curved scales. *Abdomen* with dark integument and light brown hairs. *Wings* with white and dark scales disposed as shown in the illustration (Fig. 1). Typical plume scales from distal dark area of upper

fork of second vein (Fig. 2, A) with five striae and greatest width from one-fourth to one-fifth of the total length,\* lateral squames from distal dark area of third vein (Fig. 2, B) mostly with five widely-separated striae, and greatest width one-fourth of the length. Legs black scaled; in all three pairs the tibiae and first three tarsal segments with narrow, but distinct, apical white rings. Hind legs with apical white ring also on fourth tarsal segment, mid legs with traces of pale scales apically on this segment. *Length* of white ring on hind metatarsus about equal to its greatest width, length of succeeding rings, progressively slightly shorter.

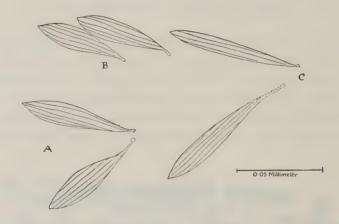


FIG. 2. Anopheles marsballi var. moucheti var. n. Wing scales. A-Plume scales from upper branch of second vein; B-Lateral squames from distal dark area of third vein; C-Plume scales from stem of second vein near fork.

Wing length : c. 3 mm.

MALE. Palpi with long segment black-scaled with narrow, apical, pale ring; last two segments white scaled with narrow basal black rings. Antennae with hairs of whorls whitish internally on proximal segments. Colouration as in the female.

The wing markings are subject to a certain amount of variation; the third pale area involving the costa and first vein may be as short on both veins as that shown on the costa in the illustration (Fig. 1), or on both veins as long as, or slightly longer than, that shown

\* This description refers to scales on a wing mounted with the dorsal surface uppermost, in canada balsaam, under slight pressure.

on the first vein. The fourth vein may have the dark area on the upper branch, or the second long pale area on the stem, interrupted.

Type 3, Buta, November, 1922, Dr. R. Mouchet; co-type  $\varphi \varphi$ (3), one from Buta, one from Bambili, and one from Api, collected in November, 1922, by Dr. R. Mouchet. Other specimens from Bambili, 5  $\varphi \varphi$ , and Buta, 1 3, November, 1922, Dr. R. Mouchet; Basoko, Aruwimi, 18.2.1924, Service Médicale, 1 3, 2  $\varphi \varphi$ ; districts de l'Equator et de l'Ubangui, 18.9.1924, Dr. Trolli, 13 specimens; Kinshasa, Dr. Duren, 1922, 3 specimens.

The specimens were submitted for identification by Dr. G. Severin, of the Musée Royal d'Histoire Naturelle de Belgique, and Dr. H. Schouteden, of the Musée du Congo Belge.

Type  $\eth$  and one co-type  $\wp$  in the collection of the Musée Royal d'Histoire Naturelle de Belgique, the other co-type  $\wp \wp$  in the collection of the Liverpool School of Tropical Medicine.

The variety is named in honour of Dr. Mouchet, who has made extensive and valuable collections of Culicidae in the Belgian Congo.

This variety differs most obviously from typical *A. marshalli* Theo. in the absence of the interruption on the third large dark area of the first vein, and in the great length of the two distal white bands of the female palpi. Mr. F. W. Edwards, who very kindly compared co-type females of this variety with typical *A. marshalli*, informed me that the wing scales were shorter as well as broader than in the type form, agreeing with *A. domicolus* as regards their length, but that they were broader and denser than in this latter species. Mr. Edwards stated further that the variety resembled typical *A. marshalli* in having narrow hind tarsal rings, and differed from *A. domicolus* in this character.